## WHAT IS CLAIMED IS:

## 1. A display device comprising:

a pixel portion including  $m \times n$  pixels ( $m \times n$  are both natural numbers and satisfy the relation  $m \times n$ ), said pixels each having a TFT;

a gate driver for feeding n gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit, wherein

said video data converter circuit converts first video data (h, k) (h =  $1 \sim m$ , k =  $1 \sim n$ ) into second video data, and wherein

the video data (h, k) constituting said first video data is converted into  $\{m(k-1) + h\}$ -th video data that constitutes said second video data.

## 2. A display device comprising:

a pixel portion including  $\mathbf{m} \times \mathbf{n}$  pixels (in a pixel  $(\mathbf{h}, \mathbf{k}), \mathbf{h} = 1 \sim \mathbf{m}, \mathbf{k} = 1 \sim \mathbf{n}$ , with  $\mathbf{m}$  and  $\mathbf{n}$  both being natural numbers and satisfying the relation  $\mathbf{m} < \mathbf{n}$ ), said pixels each having a TFT;

a gate driver for feeding n gate signal lines with selection signals;

a source driver for feeding m source signal lines with video data; and

a video data converter circuit, wherein

said video data converter circuit converts first video data (h, k) (h =  $1 \sim m$ , k =  $1 \sim n$ ) which is to be fed to said pixel (h, k) into second video data, and wherein

the video data (h, k) constituting said first video data is converted into  $\{m(k-1) + h\}$ -th video

data that constitutes said second video data.

- 3. A rear projector wherein three display devices according to claim 1 are used.
- 4. A front projector wherein three display devices according to claim 1 are used.
- 5. A rear projector wherein one display device according to claim 1 is used.
- 6. A front projector wherein one display device according to claim 1 is used.
- 7. Electronic equipment comprising a display device according to claim 1 is selected from the group consisting of a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 8. A rear projector wherein three display devices according to claim 2 are used.
  - 9. A front projector wherein three display devices according to claim 2 are used.
  - 10. A rear projector wherein one display device according to claim 2 is used.
  - 11. A front projector wherein one display device according to claim 2 is used.
  - 12. Electronic equipment comprising a display device according to claim 2 is selected from

the group consisting of a head mount display, a computer, a video camera, a DVD player, and display apparatus.

- 13. A display device according to claim 1 is a liquid crystal display device.
- 14. A display device according to claim 2 is a liquid crystal display device.
- 15. A display device comprising:
- a pixel portion including  $m \times n$  pixels (m and n are both natural numbers and satisfy the relation m < n), said pixels each having a TFT;
  - a gate driver for feeding n gate signal lines with selection signals; and
  - a source driver for feeding m source signal lines with video data.
- 16. Electronic equipment comprising a display device according to claim 15 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 17. A display device according to claim 15 is a liquid crystal display device.
  - 18. A display device comprising:
  - a pixel portion including a plurality of pixels each having a TFT;
  - a gate driver provided above said pixel portion; and

a source driver provided on one side of said pixel portion,
wherein a lateral length of said pixel portion is longer than a longitudinal length.

- 19. Electronic equipment comprising a display device according to claim 18 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 20. A display device according to claim 18 is a liquid crystal display device.
  - 21. A display device comprising:
  - a pixel portion including a plurality of pixels each having a TFT;
  - a plurality of gate signal lines connected to a gate driver; and
  - a plurality of source signal lines connected to a source driver,

wherein said plurality of gate signal lines are vertical and said plurality of source signal lines are horizontal.

- 22. Electronic equipment comprising a display device according to claim 21 is selected from the group consisting of a front projector, a rear projector, a head mount display, a computer, a video camera, a DVD player, and display apparatus.
  - 23. A display device according to claim 21 is a liquid crystal display device.